

March 9, 1955.

Dr. Leon Hoppel
National Institutes of Health
Bethesda 14, Maryland

Dear Leon:

It was nice to get your note despite its unusual brevity. My father's health improved significantly after the alarming turn it took in January and we are hopeful that he will not slip back. He has a variety of distressing symptoms which he has learned to bear. I haven't heard anything about your mother's condition. I am certainly eager to know how she is getting along.

As far as our work here is concerned, it has threatened to look promising on a number of occasions but always collapses like an overblown balloon. I really feel that Sylvy's work has shown steady progress and great potential interest. She has purified the DNAase inhibitor of coli, which I really believe is an RNA; by the use of one of Sober's resins and fractionation procedures she has obtained purifications on the order of 20-fold referred to phosphate and, what's more, the appearance of symmetry and correspondence in the chromatogram between inhibitor activity and P content. This type of work is even more back-breaking than enzyme purification, but in this case I believe the rewards will warrant it. Our ultimate objective is to correlate the concentration of this substance with events in the metabolism of normal phage infected and other disturbed forms of coli. Beside that a more important reward will be the analysis and characterization of an RNA which will represent 10% (or probably far less) of the total RNA of the cell. My own efforts have been largely abortive attempts to incorporate small or rather large non-nucleic acid units into an authentic nucleic acid fraction. While we have been discouraged, the variety of approaches has kept us from being bored.

Some time ago, when you sent us the spleen RNAase, I thought it might possibly spare our inhibitor and go after the other RNA but this was not the case. I would, however, appreciate a small amount of the lyophilized material since I would like to try it on a n RNA fraction which is only partially degraded by pancreatic RNAase.

Are you planning to go to the Federation meetings? If so, it would be nice to arrange for you to stop over on your way back. Our plans include a prior visit to Seattle before going on to San Francisco.

Best regards to Adelaide and the boys,

Sincerely,

AK/McK

Arthur Kornberg/